

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please ADD new claim 29 and AMEND the claims in accordance with the following:

1. (Currently Amended) A system, comprising:
a three-dimensional (3D) volumetric display output configuration having a display content; and
an input configuration coupled to the volumetric display output configuration and comprising a passive sensor allowing a user to affect the display content with one hand through the passive sensor by mapping the affect to a 3D position of a cursor within the display, while allowing the user to move about the display.
2. (Withdrawn) A system as recited in claim 1, wherein the sensor comprises a motion tracking camera.
3. (Withdrawn) A system as recited in claim 1, wherein the sensor comprises a glove and glove tracking system.
4. (Original) A system as recited in claim 1, wherein the sensor comprises a touch sensitive surface.
5. (Previously Presented) A system as recited in claim 1, wherein the sensor comprises magnetic field tracking system.
6. (Original) A system as recited in claim 1, wherein the output configuration comprises one of a dome, a cylinder, a cubical box and an arbitrary shape.
7. (Currently Amended) A system as recited in claim 1, wherein the input configuration comprises one of a 3D volumetric input space mapped to the 3D volumetric display, a ~~planer~~planar 2D input space mapped to the 3D volumetric display, a planar 2D input

space mapped to a planar 2D space within the 3D volumetric display, and a non-planar 2D input space mapped to the 3D volumetric display.

8. (Original) A system as recited in claim 7, wherein the user produces inputs comprising one or directly with a hand, with a surface touching device and with an intermediary device.

9. (Original) A system as recited in claim 7, wherein the input configuration further comprises one of an input volume adjacent to the display, an input volume surrounding the display, a digitizing surface covering a surface of the display, a digitizing surface offset from the surface of the display, and an intermediary device used with the display.

10. (Original) A system as recited in claim 9, wherein the intermediary device comprises one of a stylus, a surface fitting mouse, a park able mouse, a multi-dimensional mouse, a movable input device positioned on a bottom periphery of the display and a set of identical input devices positioned spaced around a bottom periphery of the display.

11. (Original) A system as recited in claim 1, wherein the input configuration comprises a non-planar 2D input space mapped to the 3D volumetric display.

12. (Withdrawn) A system as recited in claim 1, wherein the input configuration comprises a tracking system tracking a user.

13. (Original) A system as recited in claim 1, wherein the input configuration is non-spatial.

14. (Withdrawn – currently amended) A system as recited in claim 1, wherein the input configuration comprises a voice recognition system allowing the ~~use~~user to affect the display content using voice commands.

15. (Original) A system as recited in claim 1, wherein the input configuration and output configuration define a spatial correspondence between an input space and an output space.

16. (Original) A system as recited in claim 15, wherein the spatial correspondences comprises one of 3D to 3D, 2D planar to 3D, 2D planar to 2D planar and non-planar 2D to 3D.

17. (Original) A system as recited in claim 14, where the input configuration, output configuration and the user define a dynamically updatable spatial correspondence.

18. (Cancelled)

19. (Currently Amended) A method, comprising:
interacting, by a user, with a three-dimensional (3D) volumetric display via a passive detecting system; and
affecting the 3D content of the display responsive to the interaction from one hand of the user by mapping the interacting to a 3D position of a cursor within the display, while allowing the user to move about the display.

20. (Withdrawn) A method as recited in claim 19, wherein the display comprises a camera and said interacting comprises tracking movements by the user with the camera.

21. (Currently Amended) A system, comprising:
a three-dimensional (3D) volumetric display output configuration having a display content; and
an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content with one hand by mapping the affect to a 3D position of a cursor within the display, while allowing the user to move about the display, said input configuration comprising a touch sensitive surface overlaid on said display.

22. (Cancelled)

23. (Currently Amended) A system, comprising:
a three-dimensional (3D) volumetric display output configuration having a display content; and
an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content with one hand by mapping the affect to a 3D position of a cursor within the display, while allowing the user to move about the display, said input

configuration comprising a surface motion system detecting motion on a surface of said display.

24. (Cancelled)

25. (Currently Amended) A system, comprising:

a three-dimensional (3D) volumetric display output configuration having a display content; and

an input configuration coupled to the volumetric display output configuration and allowing a user to affect the display content with one hand by mapping the affect to a 3D position of a cursor within the display, while allowing the user to move about the display, said input configuration comprising an input device moving in three dimensions on a surface of said display.

26. (Currently Amended) A system, comprising:

a three-dimensional (3D) volumetric display output configuration having a display content; and

an input configuration coupled to the volumetric display output configuration and comprising a passive sensor allowing a user to manipulate the display content through the passive sensor with one hand by mapping the affect to a 3D position of a cursor, while allowing the user to move about the display.

27. (Previously Presented) A system as recited in claim 26, wherein the cursor is superimposed within the volumetric display.

28. (Previously Presented) A system as recited in claim 25, wherein the surface of said display is a deformable membrane surface.

29. (NEW) A method, comprising:

receiving an input to a three-dimensional volumetric display from a pointer operated by a user relative to an input detector outside of the display, the user located at any position in proximity to the display; and

interacting with three-dimensional content inside the display responsive to movement of the pointer by mapping the movement to the content.